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M 2 Parts 199				Application Number	10/502,351		
IMFORM	ATION DISC	CLOSUF	E	Filing Date	July 23, 2004		
WE THE STATEM	IENT BY AP	PLICAN	IT	First Named Inventor	Lian Hui ZHANG et al.		
				Group Art Unit	Unknown: 1652		
•				Examiner Name	Unknown IQBAL CHOWOHU		
				Confirmation No.	6085		
Sheet	1	of	4	Attorney Docket Number	2977-154		

			U.S. PA	TEN	T DOCUMENTS	
	U.S. Patent D	ocument		Name of Patentee or Applicant	Date of Publication	
Examiner Initials*	Cite No. ¹	Number	Kind Code (if known)	p ²	of Cited Document	of Cited Document MM-DD-YYYY

			FOREIGN PAT	ENT DOCUMENTS		
		F	Foreign Patent Document		Date of Publication of	
Examiner Initials*	Cite No.1	Office ³ Code	Number⁴ Kind⁵ (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	T⁵
n	AA	PCT	WO 01/98214 A1	NOVOZYMES BIOTECH INC.	12/27/2001	_
						

		NON PATENT LITERATURE DOC	JMENTS						
Examiner Initials*	Cite- No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published							
n	AB	ALLISON et al., "Extracellular products as mediators of the formation and detachment of Pseudomonas fluorescens biofilms," FEMS Microbiol. Lett. 167:179-184, 1998.							
a	AC	BASSLER, et al., "Cross-species induction of luminescence in the quorum-sensing bacterium Vibrio harveyi," J. Bacteriol. 179:4043-4045, 1997.							
a	AD	BECK von BODMAN et al., "Capsular polysaccharide biosynthesis and pathogenicity in Erwinia stewartii require induction by an N-acyl homoserine lactone autoinducer," J. Bacteriol. 177:5000-5008, 1995.							
n	AE	CAO et al., "Purification and structural identification of an autoinducer for the luminescence system of Vibrio harveyi," J. Biol. Chem. 264:21670-21676, 1989.							
Examiner Signature		Oghel Clow/	Date Considered	10/4/05					

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JAN 2 8 2005	Examiner Name	Unknown IQBAL CHOWOHURY	
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Or	AF	CHA et al., "Production of acyl-homoserine lactone quorum-sensing signals by gram-negative plant-associated bacteria," <i>Mol. Plant Microbe Interact.</i> 11:1119-1129, 1998.					
n	AG	COSTA et al., "Ecbl and EcbR: homologs of Luxl and LuxR affecting antibiotic and exoenzyme production by <i>Erwinia carotovora subsp. Betavasculorum</i> ," Can. J. Microbiol. 43:1164-1171, 1997.					
n	АН	DAUMY et al., "Role of protein subunits in Proteus rettgeri penicillin G acylase," <i>J. Bacteriol.</i> 163:1279-1281, 1985.					
D	AI	DAVIES et al., "The involvement of cell-to-cell signals in the development of a bacterial biofilm," Science 280:295-298, 1998.					
n	AJ	DONG et al., "AiiA, an enzyme that inactivates the acyl homoserine lactone quorum-sensing signal and attenuates the virulence of <i>Erwinia carotovora</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 97:3526-3531, 2000.					
n	AK	DONG et al., "Quenching quorum sensing-dependent bacterial infection by an N-acyl homoserine lactonase," <i>Nature</i> 411:813-817, 2001.					
a	AL	DUMENYO et al., "Genetic and physiological evidence for the production of N-acyl homoserine lactones by <i>Pseudomonas syringae</i> pv. <i>syringae</i> and other fluorescent plant pathogenic <i>Pseudomonas</i> species," <i>Eur. J. Plant Pathol.</i> 104:569-582, 1998.					
h	АМ	DUNPHY et al., "A homoserine lactone autoinducer regulates virulence of an insect- pathogenic bacterium, <i>Xenorhabdus nematophilus</i> (Enterobacteriaceae), <i>J. Bacteroil</i> . 179:5288-5291, 1997.					
pr	AN	EBERHARD et al., "Structural identification of autoinducer of <i>Photobacterum fischeri luciferase</i> ," Biochemistry 20:2444-2449, 1981.					
n	AO	EBERL et al., "Involvement of N-acyl-L-homoserine lactone autoinducers in controlling the multicellular behaviour of Serratia liquefaciens," Mol. Microbiol. 20:127-136, 1996.					
Examiner Signature	(Pale Charles Date Considered 10/4/05					

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				Group Art Unit	Unknown 1652	
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Sheet	3	of	4	Attorney Docket Number	2977-154	

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n	AP	FUQUA et al., "Conserved cis-acting promoter elements are required for density-dependent transcription of <i>Agrobacterium tumefaciens</i> conjugal transfer genes," <i>J. Bacteriol.</i> 178:435-440, 1996.						
n	AQ	INOKOSHI et al., "Cloning and sequencing of the aculeacin A acylasae-encoding gene from Actinoplanes utahensis and expression in Streptomyces lividans," Gene 119:29-35, 1992.						
h	AR	JONES et al., "The Lux autoinducer regulates the production of exoenzyme virulence determinants in <i>Erwinia carotovora</i> and <i>Pseudomonas aeruginosa,</i> " EMBO J. 12:2477-2482, 1993.						
D	AS	LEADBETTER et al., "Metabolism of acyl-homoserine lactone quorum sensing signals by Variovorax paradoxus," <i>J. Bacterioll.</i> 182:6921-6926, 2000.						
h	AT	LEADBETTER, J.R., "Quieting the raucous crowd," Nature 411:748-749, 2001.						
p	AU	LEWENZA et al., "Quorum sensing in <i>Burkholderia cepacia</i> : identification of the LuxRI homologs CepRI," <i>J. Bacteriol.</i> 181:748-756, 1999.						
M	AV	MATSUDA et al., "Molecular cloning and structure of the gene for 7β-(4-carboxybutanamido) cephalosporadic acid acylase from a Pseudomonas strain," <i>J. Bacteriol.</i> 163:1222-1228, 1985.						
D	AW	MATSUDA et al., "Nucleotide sequence of the genes for two distinct cephalosporin acylases from a <i>Pseudomonas strain</i> ," <i>J. Bacteriol.</i> 169:5821-5826, 1987.						
a	AX	NASSER et al., "Characterization of the <i>Erwinia chrysanthemi</i> expl-expR locus directing the synthesis of two N-acyl-homoserine lactone signal molecules," <i>Mol. Microbiol.</i> 29:1391-1405, 1998.						
de	AY	PASSADOR et al., "Expression of Pseudomonas aeruginosa virulence genes requires cell-to-cell communication," <i>Science</i> 260:1127-1130, 1993.						
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				Group Art Unit	Unknown 1652	
				Examiner Name	Unknown I. Chowdhung	
				Confirmation No.	6085	
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02	AZ	PEARSON et al., "Structure of the autoinducer required for expression of <i>Pseudomonas aeruginosa</i> virulence genes," Proc. Natl. Acad. Sci. USA 91:197-201, 1994.							
n	ва	PIPER et al., "Conjugation factor of Agrobacterium tumefaciens regulates Ti plasmid transfer by autoinduction," Nature 362:448-450, 1993.							
n	ВВ	PIRHONEN et al., "A small diffusible signal molecule is responsible for the global control of virulence and exoenzyme production in the plant pathogen <i>Erwinia carotovora,</i> " <i>EMBO J</i> . 12:2467-2476, 1993.							
de	ВС	SCHUMACHER et al., "Penicillin acylase from E. Coli: unique gene-protein relation," Nucleic Acids Res. 14:5713-5727, 1986.							
or	BD	STASKAWICZ et al., "Molecular characterization of cloned avirulence genes from race 0 and race 1 of <i>Pseudomonas syringae pv. Glycinea," J. Bacteriol.</i> 169:5789-5794, 1987.							
De	BE	TAKESHIMA et al., "A deacylation enzyme for aculeacin A, a neutral lipopeptide antibiotic, from <i>Actinoplanes utahensis</i> : purification and characterization," <i>J. Biochem.</i> 105:606-610, 1989.							
or	BF	VERHAERT et al., "Molecular cloning and analysis of the gene encoding the thermostable penicillin G acylase from Alcaligenes faecalis," Appl. Env. Microbiol. 63:3412-3418, 1997.							
n	BG	WHITE et al., "Genome Sequence of the Radioresistant Bacterium Deinococcus Radiodurans R1," Science 286:1571-1577, 1999.							
a	вн	ZHANG et al., "Agrobacterium conjugation and gene regulation by N-acyl-L-homoserine lactones," <i>Nature</i> 362:446-448, 1993.							
n	ВІ	Swiss-Prot. Accession Q9RYQ4, WHITE et al., (two pages) (1999).							
h	BJ	EmbL Accession AE001836, WHITE et al., (ninety pages) (1999).							
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